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Robert C Kowert			LESNIEWSKI, VICTOR D	
Conley Rose &	Tayon PC			
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/660,563 Filing Date: September 12, 2000 Appellant(s): SLAUGHTER ET AL.

> Robert C. Kowert, Reg. No. 39255 <u>For Appellant</u>

> > **EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/13/2006 appealing from the Office action mailed 10/18/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The rejection of claims 1-9, 11-19, and 21-29 under the judicially created doctrine of obviousness-type double patenting is withdrawn in view of the terminal disclaimer

filed 3/7/2006. Similarly, the rejection of claims 10, 20, and 30 under the judicially created doctrine of obviousness-type double patenting is withdrawn in view of the terminal disclaimer filed 3/7/2006. Thus, the grounds of rejection listed by the appellant on page 4 of the brief as #1 and #2 are most and will not be further discussed herein. The grounds of rejection listed by the appellant on page 4 of the brief as #3 and #4 are correct.

NEW GROUNDS OF REJECTION

After further consideration of the claims, a new ground of rejection has been determined. Claims 21-30 are rejected under 35 U.S.C. 101. The rejection will be discussed in detail in section (9) below.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,604,140	BECK ET AL.	8-2003
6,560,633	ROBERTS ET AL.	5-2003

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-15, 17-25, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Beck et al. (U.S. Patent Number 6,604,140), hereinafter referred to as Beck.

Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system or a carrier medium are rejected under the same rationale applied to the described claim.

Beck has disclosed:

• <Claims 1, 11, and 21>

A method comprising: a client reading an advertisement from a space, wherein the space comprises a network-addressable storage location (column 6, lines 1-16), wherein the advertisement comprises a Uniform Resource Identifier (URI) and a schema, wherein the URI specifies a network address at which a service may be accessed, and wherein the schema specifies one or more messages usable to invoke one or more functions of the

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service (column 4, lines 40-60); and the client sending a first message to the service at the URI, wherein the first message is specified in the schema (column 6, lines 30-39).

• <Claims 2, 12, and 22>

The method of claim 1, further comprising: the service sending a second message to the client in response to the client sending the first message to the service, wherein the second message is specified in the schema (column 6, lines 41-44).

• <Claims 3, 13, and 23>

The method of claim 1, further comprising: invoking one or more functions of the service in response to the client sending the first message to the service (column 6, lines 39-41).

• <Claims 4, 14, and 24>

The method of claim 1, wherein the schema is expressed in a data representation language (column 5, lines 46-50).

• <Claims 5, 15, and 25>

The method of claim 1, wherein the first message is expressed in a data representation language (column 5, lines 54-61 and column 6, lines 30-39).

<Claims 7, 17, and 27>

The method of claim 1, wherein the URI comprises an Internet address (column 4, lines 50-51).

<Claims 8, 18, and 28>

The method of claim 1, further comprising: the service publishing the advertisement in the space (column 4, lines 31-39).

• <Claims 9, 19, and 29>

The method of claim 1, further comprising: the client using a lookup service to find the advertisement in the space (column 5, lines 65-67).

<Claims 10, 20, and 30>

The method of claim 1, further comprising: the client using the URI and the schema in the advertisement to construct a gate for access to the service (column 7, lines 34-44).

Since all the limitations of the invention as set forth in claims 1-5, 7-15, 17-25, and 27-30 were disclosed by Beck, claims 1-5, 7-15, 17-25, and 27-30 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 16, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Official Notice. Pursuant to appellant's request for documentary evidence and MPEP 2144.03, the use of Official Notice is herein supported by Roberts et al. (U.S. Patent Number 6,560,633), hereinafter referred to as Roberts, and thus the rejection is maintained.

Beck disclosed a service framework for computing devices that allows devices to discover, advertise, and use services on a network. In an analogous art, Roberts disclosed a method for creating and invoking web services on a network.

Concerning claims 6, 16, and 26, Beck did not explicitly state a data representation language that comprises XML. However, Roberts does explicitly disclose this feature as his system is focused on generating and utilizing XML documents in order to implement web services on a network. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Beck by adding the ability to use a data representation language that comprises XML as provided by Roberts. Here the combination satisfies the need for a more efficient approach to service discovery that uses more efficient methods of describing and loading services. See Beck, column 1, lines 37-43.

Thereby, the combination of Beck and Roberts discloses:

<Claims 6, 16, and 26>

The method of claim 5, wherein the data representation language comprises extensible

Markup Language (XML) (Roberts, column 4, line 50 through column 5, line 7).

Since the combination of Beck and Roberts discloses all of the above limitations, claims 6, 16, and 26 are rejected.

The following ground of rejection is a new ground of rejection:

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-30 recite descriptive material that may or may not be

an embodiment of a computer system or embodied on a computer readable medium so as to be executable. Here, "a carrier medium" does not does not suffice as computer readable and does not constitute eligible subject matter for patentability. See MPEP 2106.IV.B.1.

The applicant's specification defines a carrier medium in terms of both statutory and non-statutory embodiments. See the specification, page 167, line 32 through page 168, line 5. The "transmission media or signals" embodiment is considered non-statutory as a signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. 101. A claim that can be read so broadly as to include statutory and non-statutory subject matter must be amended to limit the claim to a practical application.

(10) Response to Argument

In the brief, the applicant has argued:

<Argument 1>

Beck does not disclose all of the features of claim 1 and like claims because he does not disclose "a client reading an advertisement from a space" as recited in the claims.

• <Argument 2>

Beck does not disclose all of the features of claim 1 and like claims because he does not disclose "wherein the advertisement comprises a schema, wherein the schema specifies one or more messages" as recited in the claims.

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<Argument 3>

Beck does not disclose all of the features of claims 4, 5, and like claims because he does not disclose a schema or a message "expressed in a data representation language" as recited in the claims.

<Argument 4>

Beck does not disclose all of the features of claim 10 and like claims because he does not disclose "the client using the URI and the schema in the advertisement to construct a gate for access to the service" as recited in the claims.

<Argument 5>

The combination of Beck and Official Notice does not disclose all of the features of claim 6 and like claims because it does not disclose "wherein the data representation language comprises eXtensible Markup Language (XML)" as recited in the claims.

Argument 1 is discussed under the appellant's stated third ground of rejection and concerns claim 1 and like claims. See pages 5-6 of the brief. In response to argument 1, it is maintained that Beck does disclose a client reading an advertisement from a space. The rejection clearly sets forth Beck's service descriptor as an advertisement read from a space (previously cited column 6, lines 1-16). In Beck's system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client reads a matched service descriptor in order to ascertain whether the service needs to be loaded and also in order to download the service functionality. This clearly meets the limitation of reading an advertisement from a space. Furthermore, in an alternate embodiment, Beck discusses discovery of services

and teaches "To discover services, the service user needs to receive service descriptors multicasted over the ad-hoc network by other devices." This would also satisfy the limitation of reading an advertisement from a space. Beck goes on to state that "discovering a service involves loading only a service descriptor, not loading the code that implements the service." See column 4, line 61 through column 5, line 37. The appellant's discussion of the service adapter in support of argument 1 is irrelevant as it can be seen that Beck's client reads an advertisement from a space before downloading of the service interface, adapter, and implementation. The client reads the service descriptor in order to determine whether this service functionality should be downloaded as discussed above.

Argument 2 is discussed under the appellant's stated third ground of rejection and concerns claim 1 and like claims. See pages 6-7 of the brief. In response to argument 2, it is maintained that Beck does disclose an advertisement comprising a schema, wherein the schema specifies one or more messages. The rejection clearly sets forth an enhanced service descriptor that contains information about the service, including the service name, a description, and a location of code (previously cited column 4, lines 40-60). In Beck's system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client uses a matched service descriptor to download the service functionality. This download includes the service interface, the service adapter, and the service implementation which clearly effectuate the functions of the service. This clearly meets the limitation of an advertisement comprising a schema, wherein the schema specifies one or more messages usable to invoke one or more functions of the service. The service descriptor clearly includes code to allow data transfer

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between the client and service which effectuates download of service functionalities and thus is "usable to invoke one or more functions of the service". See previously cited column 6, lines 1-16. As the appellant states in support of the argument, "Beck describes a Java interface for the service that 'defines the set of operations that the service can perform on behalf of a client." Again, as the reading of a service descriptor leads to the downloading of this interface, the service descriptor contains code for data transfer that is "usable to invoke one or more functions of the service."

Argument 3 is discussed under the appellant's stated third ground of rejection and concerns claims 4, 5, and like claims. See pages 7-8 of the brief. In response to argument 3, it is maintained that Beck does disclose a schema and a message expressed in a data representation language. The rejection clearly sets forth Beck's use of a Java interface and Java classes (previously cited column 5, lines 46-61). The appellant has argued that "a Java interface is not a schema expressed in a data representation language," but has failed to provide any basis for this conjecture. In fact, Java does satisfy the limitation of a data representation language in the claims. A data representation language is not further defined or explained in the claims so as to be distinguished over the Java programming language. Java abstracts the data on bytecodes so that when applications are developed the same code may run in different environments. Java utilizes such tools as Java classes and JAR files (which include metadata) in data representation. As the appellant states, "Beck also teaches that the service interface and the service implementation are Java-based and that the RMI, OSF-RPC and IIOP inter-process

communication protocols are used." Again, the use of Java-based schema and messages meet the limitations in question.

Argument 4 is discussed under the appellant's stated third ground of rejection and concerns claim 10 and like claims. See pages 8-9 of the brief. In response to argument 4, it is maintained that Beck does disclose the client using the URI and the schema in the advertisement to construct a gate for access to the service. The rejection clearly sets forth Beck's construction of a gate for access to the service as it cites the use of the service implementation at either side or both sides of the data transfer (previously cited column 7, lines 34-44). As discussed above, in Beck's system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client uses a matched service descriptor to download the service functionality. This download includes the service interface, the service adapter, and the service implementation which clearly effectuate the functions of the service. See previously cited column 6, lines 1-16. This clearly meets the limitation of using the advertisement to construct a gate for access to the service. Furthermore, it is again noted that an enhanced service descriptor contains a URL that is used to access the service. See previously cited column 4, lines 40-60.

Argument 5 is discussed under the appellant's stated fourth ground of rejection and concerns claim 6 and like claims. See pages 9-10 of the brief. In response to argument 5, it is maintained that the combination of Beck and Official Notice (as supported by Roberts) does disclose the data representation language comprising XML. Roberts clearly teaches the use of XML in the context of expressing messages sent to invoke a service. Thus the combination of

Beck and Roberts teaches the limitation in question as discussed in the rejection in section (9) above. Concerning the appellant's statements about motivation to combine the references, it is maintained that the stated motivation in the above rejection is sufficient. See the paragraphs discussing the combination of Beck and Roberts in the rejection in section (9) above. Furthermore, the appellant has stated that "To modify Beck to use XML messages would be counter to the intended operation of Beck to employ a specific Java interface." However, this is incorrect. Beck specifically offers language independence in his system to allow the data transfer and other possible service implementations to be written in any programming language. See Beck, column 6, lines 63-65.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Conclusion

This examiner's answer contains a new ground of rejection set forth in section (9) above.

Accordingly, appellant must within TWO MONTHS from the date of this answer exercise one of the following two options to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection:

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(1) Reopen prosecution. Request that prosecution be reopened before the primary

examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other

evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of

rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any

request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) Maintain appeal. Request that the appeal be maintained by filing a reply brief as set

forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth

in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR

41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any

amendment, affidavit or other evidence, it shall be treated as a request that prosecution be

reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time

period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent

applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination

proceedings.

Respectfully submitted,

Victor Lesniewski

Patent Examiner

Group Art Unit 2152

Dated: May 17, 2006

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Conferees:

BUNJOB JAROENCHONWANIT SUPERVISORY PATENT EXAMINER

WILLIAM C. VAUGHN, JR. PRIMARY EXAMINER